

# EXPAND NETWORKS OPTIMISES SATELLITE WAN LINK FOR NORFOLK ISLAND, IMPROVING BUSINESS COMMUNICATIONS FOR POPULATION

## IN SUMMARY

- Optimized satellite links
- \$80,000 per year savings in satellite bandwidth costs
- Boosted bandwidth across the territory by as much as 100 per cent.
- Compressed and accelerated all traffic over satellite
- Reliable and improved application performance
- Improved service performance across the Island

## PROFILE

Norfolk Island is located in the Pacific Ocean between Australia, New Zealand and New Caledonia, it covers just over 34 square kilometers. Today Norfolk is a self-governing territory of Australia and home to about 2,000 people. Norfolk Telecom, is the Island's sole telecommunications provider and is a Government Business Enterprise wholly owned and operated by the Administration of Norfolk Island.

## THE CHALLENGES

Norfolk Telecom maintains the territory's network of around 2,500 landlines as well as a prepaid mobile network, internet services and the satellite communications network. With only one airport and no railways, waterways, ports or harbours – the island's remoteness and dependence on distant suppliers of goods and services, alongside its growing tourist industry means that residents and businesses are heavily dependent on a telecommunications infrastructure, which was heavily burdened by bandwidth and capacity limitations.

Norfolk Island's voice and data communications was dependant on parallel satellite links, with few aspects of life and business that are not reliant on Norfolk Telecom's ability to prioritise traffic over the WAN. Norfolk Island was looking for a way to ensure acceleration of all applications on the network to maximise the island's virtual proximity to the rest of Australia.

**“Expand Networks’ technology, excels in satellite environments by mitigating the traditional low bandwidth, high latency obstacles to improve application performance and user productivity. With Norfolk Island’s infrastructure so reliant on its satellite environment, it was especially suited to the needs of the Island.”**

- Adam Davison, Corporate VP Sales and Marketing, Expand Networks

## THE SOLUTION

Norfolk Telecom was seeking to improve the service offered to the Island, increase the bandwidth and reduce the latency of all internet based services. Expand won the open tender to deliver those improvements, introducing a combination of compression, TCP

## WEB LINKS

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acceleration for web traffic and web and FTP caching to deliver immediate improvements in bandwidth and traffic speed.

Expand Networks' Accelerators use low latency, lossless techniques that work on all applications to consistently deliver average bandwidth increases between 100 per cent and 400 percent. Expand's Quality of Service (QoS) enforcement also ensures that applications run unimpeded on the WAN, enhancing prioritization with sophisticated algorithms to combat congestion, mark packets for downstream QoS handling and rate control shaping to make sure data flows get the bandwidth they need.

## THE BENEFITS

The result of the implementation was an overall increase of between 25 and 50 per cent in bandwidth available across the network – up to 100 per cent in some areas.

Expand Networks' WAN optimisation technology saved Norfolk Island \$80,000 per year in satellite bandwidth costs and boosted bandwidth across the territory by as much as 100 per cent.

Stuart Robertson, Chief Technology Officer Technical Officer – Network and Systems of Norfolk Telecom added; “Expand's technology has enabled us to improve our service offerings, doubling the bandwidth we can offer and reducing the latency experienced by customers when using internet based services. We have cut costs by avoiding the need to upgrade our satellite links and the ease of use. The quality of service and priority traffic functions of the Expand accelerator ensures our remote location does not inhibit the function of key community services.”

## LEARN MORE

Some of the best-known names in financial services, manufacturing, retail, health care, as well as leading government agencies and the military, rely on Expand Networks for optimized network infrastructures and superior applications performance.

For more information on how Expand solutions can benefit your company, contact your local Expand representative today or visit us at [www.expand.com](http://www.expand.com).